

A NEW NEOTROPICAL *CHRYSOPS*
(DIPTERA, TABANIDAE)¹

BY L. L. PECHUMAN
Lockport, New York

The writer has realized for some time that the *Chrysops uruguayensis* discussed by Kröber (1926) was not the species described by Lutz under that name. However, he did not wish to add to the already overburdened synonymy of Neotropical *Chrysops* and as long as the identity of two of Brethes' species was unknown, there was danger of this. Dr. Walter H. Hack of the Instituto de Medicina Regional, Resistencia, Argentina, has kindly furnished the writer with descriptions of the Brethes species and both of them seem to be distinct from the species described below.

Chrysops patricia n. sp.

Holotype female. Length 8 mm.

Head: First two antennal segments yellow-brown with black hairs; third antennal segment yellow-brown at base, flagellum black; third antennal segment subequal in length to total length of the first two segments. Frons yellow-gray pollinose with pale hairs; dark brown pollinose in ocellar area with dark hair. Frontal callus large, brown, margined above with black. Frontoclypeus shining dark yellow with a narrow yellow-gray pollinose stripe extending from beneath the antennae about half the length of the frontoclypeus. Cheeks densely grayish-yellow pollinose with a denuded area below on each side which is mottled yellow and black. Palpi yellow-brown, paler on inner surfaces. Proboscis black. *Thorax*: Dorsum dark brown with two narrow pale stripes and a broader stripe on each side above the wing base. Scutellum reddish brown with a faint dark horizontal stripe near base. Pleura brown with the usual yellowish pollinose areas. Halteres brown. Legs slender, mostly dark brown with a reddish tinge which is especially evident on the fore coxae and middle tibiae; middle and

¹Published with a grant from the Museum of Comparative Zoology at Harvard College.

hind tarsi reddish brown, becoming darker at apex. Wings as figured; membrane very clear; the outer margin of the crossband is straight to the third longitudinal vein where it cuts back toward the base of the wing and then again runs straight to the fourth posterior cell where it stops short of the wing margin; the fourth posterior cell is slightly more than half infuscated; the fifth posterior cell is mostly hyaline with a small infuscated area at the base; the inner margin of the crossband reaches the posterior margin of the wing only as a narrow streak along both sides of the vein separating the fifth posterior and anal cells; apical spot narrow, the same width as the marginal cell, extending into the upper corner of the second submarginal cell over about one-fifth of the upper branch of the third

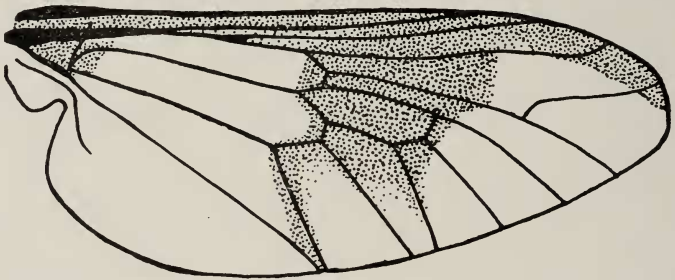


Fig. 1. *Chrysops patricia* Pechuman n. sp. Wing.

longitudinal vein. *Abdomen*: Abdomen dark brown with pale grayish yellow markings. First tergite dark brown with a pale posterior border which expands laterally reaching the anterior margin of the segment and leaving an isolated dark brown spot on the posterior margin at the lateral margin of the segment; second tergite with large pale lateral spots which are the full width of the tergite at the lateral margins and gradually narrow toward the center and do not quite meet along the anterior margin of the tergite, and with a pale posterior border which expands into a large mid-dorsal triangle which reaches the anterior margin, and on each side of the mid-dorsal triangle the pale border expands to form a small flat triangle; third to sixth tergites dark brown with pale posterior borders which on the third and fourth tergites expand into small mid-dorsal

triangles. First sternite dull yellow with some vague dark markings; second sternite dull yellow with a faint indication of a dark central spot; third sternite dull yellow with a large median spot; fourth and following sternites fuscous with a yellow posterior border.

Cerro Pelado, Paraguay (F. Schade), M. C. Z. No. 29080. *Paratypes*: 1 female with same data as holotype; 1 female, Villarrica, Paraguay (F. Schade); 1 female, Aregua, Paraguay, 20 September 1915 (Zurcher); 1 female, Tucumán, Argentina, October; 1 female, Gran Guardia, Territory of Formosa, Argentina, October, 1952 (J. Foerster). Another female from Villarrica was studied, but since it is in poor condition and differs in several particulars from the rest of the material, it is not included in the paratype series.

Holotype and two paratypes No. 29080, in the Museum of Comparative Zoology, Cambridge, Massachusetts; three paratypes in the collection of the writer.

Variations: The series of specimens varies in length from 7 to 9 mm. The pollinose stripe on the frontoclypeus varies from a little longer to a little shorter than in the holotype. Some of the specimens show some indefinite dark streaks on the frontoclypeus and slight darkening around the frontoclypeal pits. The denuded area on the lower portion of the cheeks varies in size, and in color, from yellow to black. In two specimens the two pale stripes on the dorsum of the thorax broaden anteriorly until they meet. In one specimen the dark marking of the second tergite is reduced so that the pale lateral triangles reach across the dark marking leaving leaving two dark spots near the posterior-lateral margins of the tergite. In one specimen the pale median triangle of the second tergite does not reach entirely across the segment although its upper portion is indicated by a paling of the dark marking in that area.

Comparative Notes: *C. patricia* seems to be the species discussed by Kröber (Konowia 4: p. 358, 1926) as *uruguayensis*. Kröber, however, mentioned that his interpretation of *uruguayensis* differed from Lutz' description of the wing pattern of the type. In some undetermined material at the United States National Museum, made available through the kindness of Dr. Alan Stone, the writer several years ago found a specimen from Buenos Aires, Argentina, which

closely matches Lutz' description and figure of *uruguayensis*. Three other specimens recently received also match Lutz' species. These were collected by Juan Foerster on February 15, 1953 at Isla Berna in the delta of the Paraná River near Tigre, Province of Buenos Aires, Argentina. *C. patricia* is easily separated from *uruguayensis* Lutz by the hyaline apical portion of the fourth posterior cell, uniformly narrow apical spot united for almost its full width with the crossband (apical spot expanded apically and just barely united with the crossband in *uruguayensis*) and by the outer margin of the crossband which is relatively straight below the third longitudinal vein and somewhat irregular in *uruguayensis*.

Kröber thought what he considered to be *uruguayensis* might be the same as *bonariensis* Brethes but on a basis of Hack's recent paper (1951) they must be quite different. The species redescribed by Hack, who had access to Brethes' type, is either the same or closely related to *C. triaria* Macquart.

Some of the specimens of *C. patricia* received from the Museum of Comparative Zoology, through the cooperation of Dr. J. C. Bequaert, were labeled *paraguayensis* Brethes. Dr. Hack kindly sent a redescription of the type of *C. paraguayensis* to the writer and this indicates that this species lacks an apical spot and the crossband is straight from the costa to the posterior margin of the wing. *C. paraguayensis* evidently is closely related to *C. formosa* Kröber and may be the same although the known range of the two forms is rather widely separated.

REFERENCES

BRETHES, J.

1910. Dípteros nuevos ó poco conocidos de Sud América. An. Mus. Nac. Hist. Nat. Buenos Aires, (3) 13: 472-484.

HACK, WALTER HELLMUT.

1951. Contribución al estudio de los tabanidos Argentinos (Diptera). An. Inst. Med. Reg. Univ. Nac. Tucumán. 3: 157-184.

KRÖBER, O.

1926. Die *Chrysops*-Arten Süd- und Mittelamerikas nebst den Arten der Inselwelt und Mexikos. Konowia, 4: 319-375.

LUTZ, AD.

1909. Tabaniden Brasiliens und einiger Nachbarstaaten. Zool. Jbtr. Suppl., 10: 619-692.